

CLAIMS

What is claimed is:

1. A networking interface device for coupling a system host having one of a plurality configurations to a network medium, comprising:

a peripheral component interconnect (PCI) interface for coupling the interface device to a system host configured with a PCI based system bus interface;

a medium independent interface (MII) for coupling the interface device to a system host configured with a media access controller (MAC) based system bus interface; and

a control block for determining whether the interface device is operably coupled to a system host having a PCI based system bus interface or a MAC based system bus interface.

2. The networking device according to claim 1, wherein the control block determines that the interface device is coupled to a system host having a MAC based system bus interface by detecting the presence of at least one of a management data clock (MDC) or a management data input/output (MDIO) signal transmitted from an MII on the system bus interface to the MII of the interface device.

3. The networking device according to claim 1, further comprising a buffer management device (BMU) having an active state for bursting data packet traffic via the PCI interface when the interface device is coupled to a PCI based system bus interface and a passive state for continuously passing data packet traffic via the MII when the interface device is coupled to a MAC based system bus interface.

4. The networking device according to claim 3, wherein the control block generates a suspend burst signal upon the detection of the network device being coupled to the MAC based system bus interface, the suspend burst signal being sent to the BMU and instructing the BMU to enter the passive state.

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5. The networking device according to claim 4, wherein the control block includes a PCI control block for managing communication between the system bus interface and the interface device.

6. The networking device according to claim 3, further comprising an MII attachment connected to buffer data packet traffic sent between the BMU and the MII.

7. The networking device according to claim 3, further comprising at least one physical layer device (PHY) connected to the BMU via a receive processing block and a transmit processing block, the PHY for carrying out networked communications with a remote system host in accordance with a home phoneline network alliance (HPNA) specification via the network medium.

8. A method of operably coupling a system host to a network medium using an interface device, the system host having either a peripheral component interconnect (PCI) based system bus interface or a media access controller (MAC) based system bus interface, the method comprising the steps of:

detecting the presence or absence of at least one of a management data clock (MDC) or a management data input/output (MDIO) signal transmitted from a medium independent interface (MII) on the system bus interface to an MII of the interface device, the presence of the at least one of the MDC or the MDIO indicating the system host has a MAC based system bus interface; and

generating a suspend burst signal upon detection of a MAC based system bus interface.

9. The method according to claim 8, further comprising the step of reconfiguring a buffer management unit (BMU) from an active state for bursting data packet traffic for the PCI based system bus interface to a passive state for continuously passing data packet traffic for the MAC based system bus interface.